

## PROVA AUDITIVA: EXAM and ANSWERS

### WORLD MATHS DAY

#### Introduction

In this radio programme you are going to hear some new words. Read and listen to them. Make sure you know what they mean.

founder

fault

app

geek

Ready?

Now read the questions slowly before listening to the radio programme.

**Presenter:** It's early April. The football season is nearly at an end after last month's FA Cup quarter finals. Horse-racing fans are looking forward to the Grand National at Aintree, and Formula 1 addicts have already enjoyed the first Grand Prix of the season on TV. However, one of the biggest competitive events of the month has just taken place – and you've probably never even heard of it. I'm talking about World Maths Day.

[short pause]

Here with us today is Harish Patel, a former contestant who was invited to join World Maths Day as a game designer in 2011. He impressed the founders by scoring three class prizes before turning eighteen almost a year ago – an impressive achievement, Harish!

**Harish:** One more than that, actually, although I'm far from being the top scoring competitor.

**Presenter:** I'm sorry, I should have counted better! I was terrible at maths at school.

**Harish:** A lot of people say that! In a survey of American adults, nearly one out of every four people said they hated maths at school. Many people believe maths is difficult, but I don't know why. Unlike, say, history, it's a 'real life' skill, one which we use every day. I think the problem is that many teachers themselves are afraid of maths, and so they don't do enough to excite students. That's something we really try to challenge with World Maths Day.

**Presenter:** It's a big event, isn't it?

**Harish:** Huge – and there are more people taking part each year! In 2010 for example, 2.4 million students from 236 countries correctly answered 479 million maths questions. In 2011, 5.3 million students from 215 countries correctly answered around 430 million questions. I think that's partly my fault – so many students were so good in 2010, I made the questions more challenging for the 2011 contest!

**Presenter:** And how do students take part?

**Harish:** All they need is internet access – we've even got a mobile phone app, although it's a bit easier on a computer. Anyone aged four to eighteen can play, whether they're a school student, home

student, or don't even go to school at all. You can register online without sitting any entrance exams. Players compete against each other or the computer for the top scores. You have sixty seconds per problem, and a hundred problems to solve in 48 hours.

**Presenter:** It sounds like a computer game.

**Harish:** That's exactly what it is, it's a giant multi-player computer game, only you're competing as yourself, not a fantasy character! Of course, computer game design and development is one career path where understanding maths is very useful. Students often don't realize that. They think that if you study maths, all you can do is become a maths professor. I think this is the media's fault – lots of people there with an arts background! But we need mathematicians to do all kinds of things - to monitor populations of endangered animals, or to work out the best angle for a football kick. A maths degree can lead to incredibly diverse and fascinating careers, even in mixing music – that's very mathematical!

**Presenter:** So you think that maths has a bad image?

**Harish:** Definitely. We give lots of publicity to arts and sports, but hardly anything to the sciences. And yet quite a few celebrities are actually science geeks! Even though he never went to college, actor Will Smith is well-known for his love of maths. And did you know that Cindy Crawford started a degree in chemical engineering before leaving to become a model? Brian May, the guitarist from Queen, graduated with a PhD in astrophysics, while the actress Michelle Pfeiffer's logic-solving abilities earned her a place in Mensa.

**Presenter:** I didn't know there were so many scientists and mathematicians in Hollywood ...

**Harish:** Sadly, they're still the minority! But with World Maths Day, we're aiming to boost the statistics globally. At the moment, much of Europe is far behind many Asian countries when it comes to getting the best school and university results in maths. After Finland, South and North Korea, Japan and China lead the way, with the UK the next European country to enter the charts, and the USA quite a distance behind. However, signs are encouraging. After a long decline, numbers of students taking up mathematics at university are starting to show a small increase, especially amongst women. Some good news to end with!

**Presenter:** Indeed. Let's hope it continues. Well, thank you very much, Harish ... *[fade]*

## QUESTIONS

Choose the best answer according to the recording. Only one answer is correct. Look at number 0 as an example.

[0.25 points for each correct answer. Wrong answers will be penalized by deducting 0.08 points. There is no penalty for unanswered questions.]

### 0. Which of these events has *not* happened yet?

- A. ☐ FA Cup quarter finals
- B. ☒ the Grand National
- C. ☐ the first Formula 1 Grand Prix
- D. ☐ World Maths Day

### 1. What do we learn about Harish Patel?

- A. ☒ He designs games for World Maths Day.
- B. ☐ He helped to start World Maths Day.
- C. ☐ He scored a total of three prizes in World Maths Day.

- D. ☐ He's the highest scoring contestant in World Maths Day.

**2. What does Harish think is the problem with maths?**

- A. ☐ It's a difficult subject.  
B. ☐ It doesn't obviously relate to 'real life'.  
C. ☒ It isn't well-taught.  
D. ☐ It's less exciting than other subjects.

**3. How was the 2010 World Maths Day different from the 2011 World Maths Day?**

- A. ☐ There were more contestants in 2010.  
B. ☐ Students from fewer countries took part in 2010.  
C. ☒ There were more correct answers in 2010.  
D. ☐ The questions were more challenging in 2010.

**4. Competitors in World Maths Day ...**

- A. ☒ don't have to use a computer.  
B. ☐ can be any age under eighteen.  
C. ☐ are all school students.  
D. ☐ need to pass a test first.

**5. What do competitors do as part of the World Maths event?**

- A. ☐ Meet other contestants.  
B. ☐ Answer questions in 100 seconds.  
C. ☒ Solve problems over two days.  
D. ☐ Design online characters.

**6. Which of the following is *not* mentioned as a possible career path for mathematicians?**

- A. ☒ media  
B. ☐ environmental science  
C. ☐ sport  
D. ☐ music

**7. According to Harish, which of these people has a science degree?**

- A. ☐ a famous actor  
B. ☐ a famous model  
C. ☒ a famous musician  
D. ☐ a famous actress

**8. Which country does Harish say achieves the best results in maths?**

- A. ☐ the UK  
B. ☐ China  
C. ☐ the USA  
D. ☒ Finland